


Proposed Implementation for Saudi Aramco website already infringing on 8438487
To use 10296198, 8108792, 9405852, 7712044 etc. to improve homepage display operation
 Screenshots captured from <https://www.saudiaramco.com/en> in December 2019.

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| 10, 296,198 | Automated changing of a content set displaying in a designated display area of a webpage displaying on a display screen of a browser |
| <p>Claim 1. A method of programming a webpage of a website to time-share at least one designated displaying area of a part of the webpage to display a plurality of sets of content one set of content at a time, each for a pre-designated time interval when the webpage is accessed by a user through entering a uniform resource locator (URL) of the webpage into a web-browser on an interactive display screen of an electronic display device, the method comprising: designating and defining the at least one designated displaying area in a user desired displaying area on a desired part of the webpage for</p> | <p>Go to Saudi Aramco website https://www.saudiaramco.com/en, the capture of the top-screen portion of the homepage displaying in this portion of the page is shown below:</p>  <p>In the afternoon the displaying content changed inexplicably and unexpectedly to:</p>  <p>Other displaying contents for this top portion of the homepage of the headquarters site of Saudi Aramco also appeared throughout the course of browsing the site, seemingly semi-systematically, only partially consistently and quite confusing. The goal of the changes</p> |

displaying a plurality of sets of content; designing a plurality of sets of content that a website owner most want users of the website to see on this part of the webpage, and program the plurality of sets of content to be displayed in the designated displaying area of the webpage and store them in the database of the webpage; designating a time interval for displaying each set of the plurality of sets of content; programming the displaying of the webpage to automatically display the plurality of sets of content one at a time in the designated displaying area of the webpage when the URL is entered into the web-browser by the user, each set of content displaying for a pre-designated time interval for the set of content, including: after a

seems to be featuring various main themes of Saudi Aramco to the visitors during the course of their browsing activities responding the visitor interests but in an ad-hoc way. The content-sets displayed in this most important prime display real-estate of the site, the top screen portion of the home page, Dr. Lin-Hendel have seen in her investigative browsing activities are shown below:



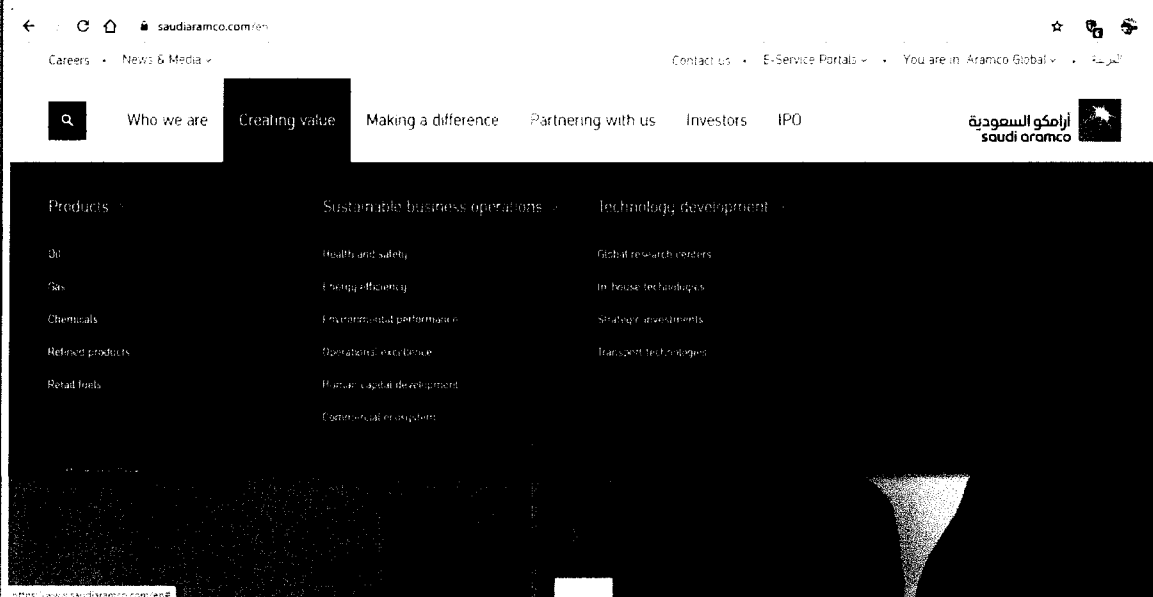
The "Subject Label" in the rectangular blue box in the above displaying content-sets are: **"WHO WE ARE"** in the first two content-sets with tagline: **"Enabling Opportunity"**.

In the next two content-sets are:

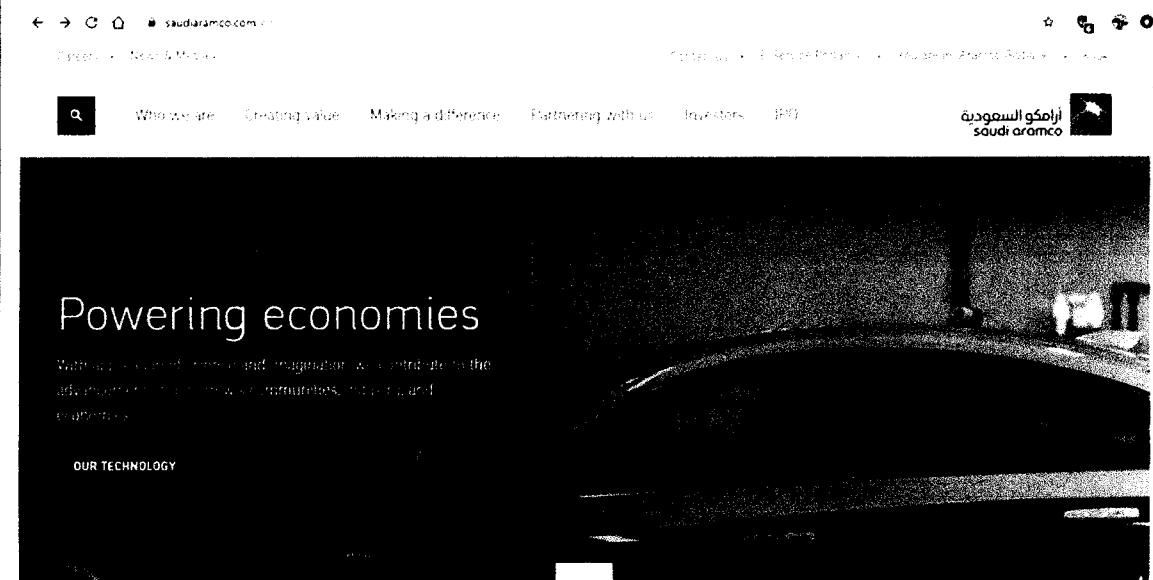
first set of content of the plurality of sets of content displaying for a first interval of time, automatically removing the first set of content from the designated displaying area, and moving into the designated displaying area a second set of content of the plurality of sets of content for a second interval of time, the second set of content replacing the first set of content so that there is continual and automatic progressing to display a next set of content of the plurality of sets of content by replacing an immediately preceding set of content displayed in the designated displaying area, and continually looping through the plurality of sets of content when no user command is issued for a change,

“OUR PRODUCTS”, with two different taglines: **“Less emissions”** and **“Legacy of reliability.”**

The content-sets displaying in the top portion of the homepage below shows up when returning to the homepage from visiting anyone of the 2nd level subcategories under the right-most 1st level subcategory “Technology development” in the brows-able dropdown menu under the top level category “Creating value”:



The homepage shown when returning to it from the above described Technology subcategories:



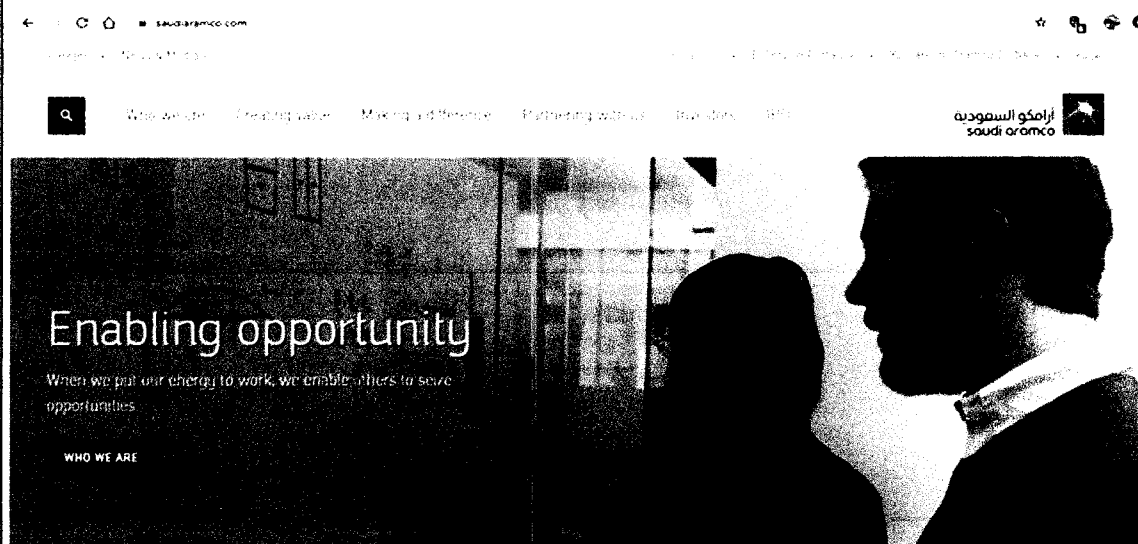
But returning to the homepage from the middle column of subcategories in the brows-able

automated looping requiring no user action, except for when an initiation action to commence automated looping is desired; and programming a user-website interaction mechanism used with the designated displaying area of the webpage for the user to receive instructions from the website and for the website to receive a user command.

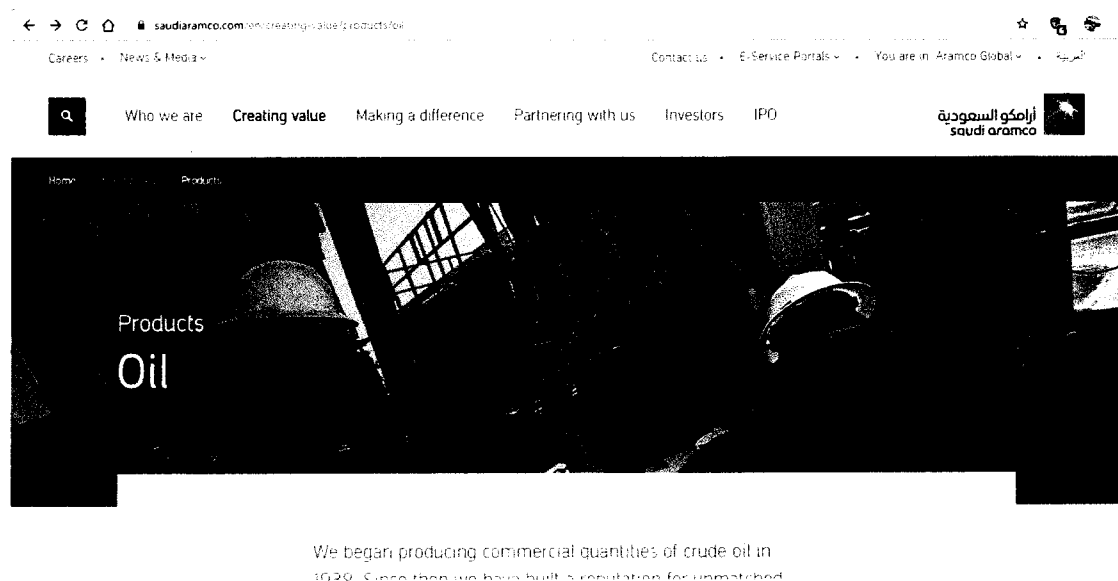
Claim 5. The method according to claim 1, wherein a content set in the plurality of content sets is embedded with a link, linking to information related to the content set.

Claim 9. The method according to claim 1, wherein a set of floating directional indicators is displayed overlapping a

dropdown menu “Sustainable business operations” does not return to a homepage displaying a content-set specifically related to “Sustainable business operations,” nor to a page related to “Creating value”. The 2nd content-set shown above “Who we are” is displayed when returning to the homepage from browsing the middle column of subcategories “Sustainable business operations” under the “Creating value” category:



Returning to homepage after visiting the first column of subcategories under “Products” yield different displaying content-sets”. For example, after visiting the “Oil” page shown below, and return to the Homepage by various means,



One finds at the homepage the content-set with the image of the ocean with a sailboat and tagline “The legacy of reliability” with the page name “OUR PRODUCTS”, which was shown before in the 4th capture from the top.

However, if one returns to the Homepage from a different subcategory of “Products”,

displaying content set to allow a viewer to access a previously displayed content set, or to skip to a next content set in a lineup of the plurality of content sets.

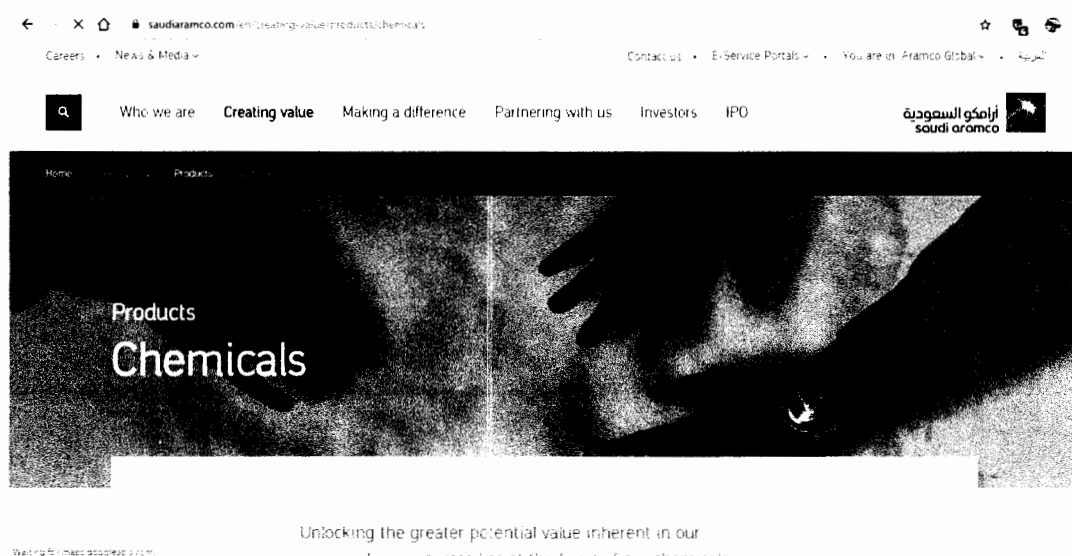
Claim 10.
The method according to claim 1, wherein a set of floating non-directional indicators is displayed overlapping a part of a displaying content set, while indicating which of the plurality of content sets is presently displaying in the designated display area and allowing a user to command the displaying of any set in the plurality of content sets programmed to be displayed in the designated display area.

different content-sets would be shown in the top portion of the Homepage.

Returning from visiting the “Gas” subcategory, the 3rd capture from the top of this Chart—with the tagline “Less emissions” is shown. Subject matter wise, both cases make sense, but system-wise the operation is inconsistent.



Returning to Homepage from visiting the “Chemicals” page:



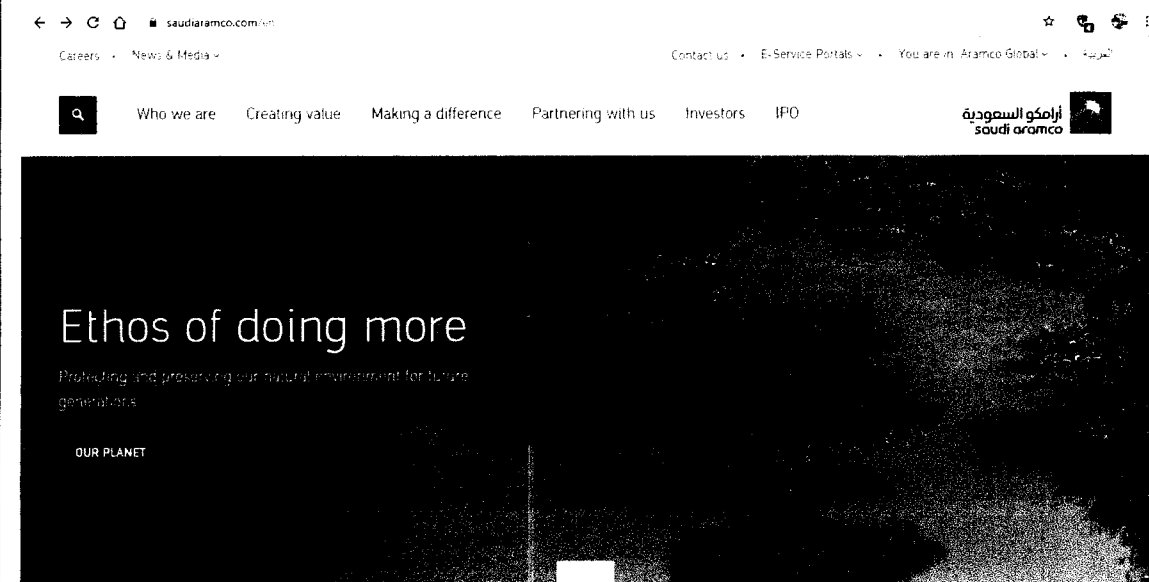
One finds a content-set with tagline “New source of value” displaying. The capture is shown at the top of the next page. The inconsistency of the displaying operation for the most important site real-estate, the top-portion of the Homepage, and in fact all other category and subcategory pages can be drastically improved by using the Homepage implementation by Saudi Aramco Energy Ventures of the family of seven patented

inventions teaching the automated changing of the displaying content-set, as illustrated in Chart 7. This family of patented inventions can be implemented in any designated display areas of any page, but most importantly at the top-screen portion of a primary page, and especially beneficial and important to implement at the top portion of the Homepage.

Returning to the Homepage from the subcategory page “Chemicals”:



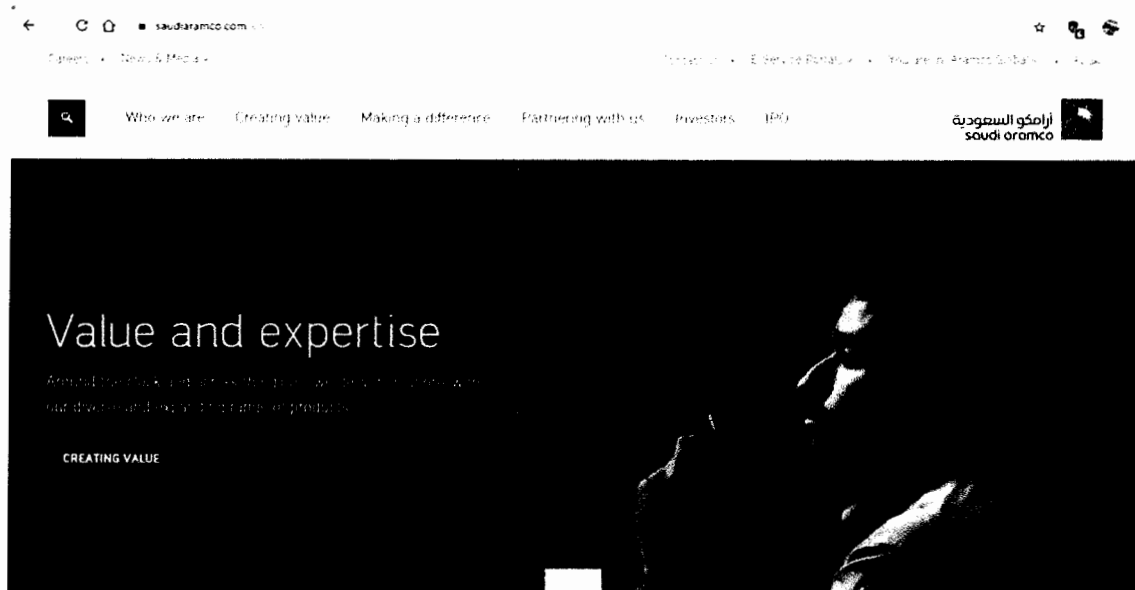
Returning to Homepage from another subcategory “Health and safety” under the “Sustainable business operation”, which is under “Creating value” finds yet another content-set displaying at the top portion of the Homepage:



A systematic approach to the design and programming using Lin-Hendel’s patented

inventions in the Internet space gives a website much more powerful and efficient functionalities and attractive presentation. The Lin-Hendel Internet patents teach the best ways of using website resources most effectively and attractively to enhance and expand the website owners' businesses, reach and profitability.

Below is another random content-set titled with "CREATING VALUE" displaying in the top portion of the Homepage, which the author of this chart have no idea how it got there, from where the author was returning to the Homepage.



8108792: Automated scrolling of browser content and automated activation of browser links

Claim 1: A method of displaying and navigating through a website, comprising: displaying on a display of a computer a page of the website; and during the displaying operation and without any user-initiated actions, automatically scrolling at least part of the page while the user of the computer does nothing.

Claim 11: An apparatus for displaying and navigating through a website, the apparatus comprising a computer configured to perform a method comprising: displaying on a computer display a browser window having a field of view for displaying a page of the website within the field of view; and during the displaying operation and without any user-initiated actions, automatically scrolling at least part of the page while the user of the computer does nothing.

9405852 Automated Changing of Content Set Displaying in the Display Screen of a Browser and Automated Activation of Links Contained in the Displaying Content Set.

Claim 1: A computer implemented method of programming digital content to be displayed on an interactive display screen of an electronic display device to be viewed by a user, the interactive display screen is actionable by a user command, the method comprising: displaying a page of content on the interactive display screen, wherein the page comprises a designated area for displaying one or more of a plurality of sets of content wherein the space required to display the plurality of sets of content collectively is larger than the space available in the designated area at a given point in time; displaying, in the designated area, a first set of content of the plurality of sets of content for a first period of time; and automatically moving, into the designated area and replacing the first set of content, a second set of content of the plurality of sets of content for a second period of time, thus continually and automatically progressing to display a next set of content of the plurality of sets of content by replacing the immediate preceding set of content currently displayed in the designated area; wherein each set of content comprises at least one actionable link linking to additional actionable content related to an object represented in the respective set of content currently being displayed in the designated display area; and displaying, upon activation of the at least one of the actionable links, the additional content related to the object by the display device, separately from the displaying of the each set of content in the designated area.

Claim 11: A system for interactively displaying digital content on an electronic display device, the system manipulating the digital content to display in a dynamic and user friendly manner, the system comprising at least one computing device comprising a non-transitory computer readable storage media further comprising executable instructions, further comprising: at least one hardware processor coupled to the non-transitory computer readable storage media which executes the instructions and is configured to: display a page of content on an interactive display screen of the device, wherein the page comprises a designated area for displaying one or more of a plurality of sets of content wherein the space required to display the plurality of sets of content collectively is larger than the space available in the designated area at a given point in time; display, in the designated area, a first set of content of the plurality of sets of content for a first period of time; and automatically moving, into the designated area and replacing the first set of content, a second set of content of the plurality of sets of content for a second period of time, thus continually and automatically progressing to display a next set of content of the plurality of sets of content by replacing the immediate preceding set of content currently displayed in the designated area; wherein each set of content comprises at least one actionable link linking to additional actionable content related to an object represented in the respective set of content currently being displayed in the designated area; and display, upon activation of the at least one of the actionable links, the additional content related to the object by the display device, separately from the displaying of the each set of content in the designated area.

10,296,198---all claims

1. A method of programming a webpage of a website to time-share at least one designated displaying area of a part of the webpage to display a plurality of sets of content one set of content at a time, each for a pre-designated time interval when the webpage is accessed by a user through entering a uniform resource locator (URL) of the webpage into a web-browser on an interactive display screen of an electronic display device, the method comprising: designating and defining the at least one designated displaying area in a user desired displaying area on a desired part of the

webpage for displaying a plurality of sets of content; designing a plurality of sets of content that a website owner most want users of the website to see on this part of the webpage, and program the plurality of sets of content to be displayed in the designated displaying area of the webpage and store them in the database of the webpage; designating a time interval for displaying each set of the plurality of sets of content; programming the displaying of the webpage to automatically display the plurality of sets of content one at a time in the designated displaying area of the webpage when the URL is entered into the web-browser by the user, each set of content displaying for a pre-designated time interval for the set of content, including: after a first set of content of the plurality of sets of content displaying for a first interval of time, automatically removing the first set of content from the designated displaying area, and moving into the designated displaying area a second set of content of the plurality of sets of content for a second interval of time, the second set of content replacing the first set of content so that there is continual and automatic progressing to display a next set of content of the plurality of sets of content by replacing an immediately preceding set of content displayed in the designated displaying area, and continually looping through the plurality of sets of content when no user command is issued for a change, automated looping requiring no user action, except for when an initiation action to commence automated looping is desired; and programming a user-website interaction mechanism used with the designated displaying area of the webpage for the user to receive instructions from the website and for the website to receive a user command.

2. The method according to claim 1, wherein a content set in the plurality of content sets includes an image.

3. The method according to claim 1, wherein a content set in the plurality of content sets includes a video clip.

4. The method according to claim 1, wherein a content set in the plurality of content sets includes an animated image with a portion of the animated image changing in time.

5. The method according to claim 1, wherein a content set in the plurality of content sets is embedded with a link, linking to information related to the content set.

6. The method according to claim 1, wherein a mechanism of changing from displaying one content set to a next content set is a visible scrolling movement of a displaying content set.

7. The method according to claim 1, wherein a mechanism of changing from displaying one content set to a next content set appears to be a sudden change to human eye, in a fashion of an un-animated slide show.

8. The method according to claim 1, wherein a mechanism of changing from displaying one content set to a next content set is an animated change that takes place in a time-duration discernable to human eye, in a fashion of an animated slide-show.

9. The method according to claim 1, wherein a set of floating directional indicators is displayed overlapping a displaying content set to allow a viewer to access a previously displayed content set, or to skip to a next content set in a lineup of the plurality of content sets.

10. The method according to claim 1, wherein a set of floating non-directional indicators is displayed overlapping a part of a displaying content set, while indicating which of the plurality of content sets is presently displaying in the designated display area and allowing a user to command the displaying of any set in the plurality of content sets programmed to be displayed in the designated display area.

11. The method according to claim 1, wherein a content set in the plurality of content sets is designed to represent a theme story, a news story, a line of products or services, or a product or service.

12. A method as in claim 1: wherein at least one set of content in the plurality of sets of content is embedded with at least one actionable link linking to additional content related to an object represented in the respective set of content to be displayed in the designated area; and wherein, upon activation of the at least one of the actionable links by a user indicating interest, the additional content linked by the activated link is displayed on the display device for the user.

13. A system comprising a plurality of networked computers and electronic display devices loaded with software programs including website hosting utilities, databases, web-browser software and webpage programming and displaying software linking to the web-browser and the electronic display devices; the system further comprising: a webpage of a website programmed to time-share a designated displaying area in a part of the webpage to display a plurality of sets of content one set of content at a time, each for a pre-designated time interval when the webpage is accessed by a user through entering a uniform resource locator (URL) of the webpage into a web-browser on an interactive display screen of an electronic display device, the system enables: the designation and defining of a displaying area on a part of the webpage for displaying a plurality of sets of important content that a website owner most wants users of the website to see in this designated display area, designing the plurality of sets of content to store in an easily updatable fashion in the database for the webpage and designating a desired time interval to display each set of the plurality of the content set and store the time intervals in an easily updatable fashion in the database of the webpage, displaying the plurality of sets of content in the designated displaying area of the webpage displaying in a web-browser each for a designated time interval when a user enters the URL of the webpage into the web-browser on the electronic display device; the web-browser displaying the webpage on the electronic device automatically displays the plurality of sets of content one at a time in the designated displaying area of the webpage when the URL is entered into the web-browser by the user, each set of content displaying for a pre-designated time interval for the set of content, including: after a first set of content of the plurality of sets of content displaying for a first interval of time, automatically removing the first set of content from the designated displaying area, and moving into the designated displaying area a second set of content of the plurality of sets of content for a second interval of time, the second set of content replacing the first set of content so that there is continual and automatic progressing to display a next set of content of the plurality of sets of content by replacing an immediately preceding set of content displayed in the displaying area, and continually looping through the plurality of sets of content when no user command is issued for a change, automated looping requiring no user action, except for when desired an initiation action to commence automated looping; and a mechanism allowing user-website interaction used with the

designated displaying area of the webpage for the user to receive instructions from the website and the website to receive a user command.

14. The system according to claim 13, wherein a set of floating non-directional indicators is displayed overlapping a displaying content set, while indicating which of the plurality of content sets is presently displaying in the designated display area and allowing a user to command display of any set in the plurality of content sets programmed to be displayed in the designated display area.

15. The system according to claim 13, wherein a content set in the plurality of content sets is designed to represent a theme story, a news story, a line of products or services, or a product or service.

16. The system according to claim 13, wherein a content set in the plurality of content sets includes an image.

17. The system according to claim 13, wherein a content set in the plurality of content sets includes a video clip.

18. The system according to claim 13, wherein a content set in the plurality of content sets includes an animated image with a portion of the image changing in time.

19. The system according to claim 13, wherein a content set in the plurality of content sets is embedded with a link, linking to information related to the content set, when the link is activated by a user, the information is brought forth to display on the electronic display device for the user.

20. The system according to claim 13, wherein a mechanism of changing from displaying one content set to a next content set is a visible scrolling movement of a displaying content set.

21. The system according to claim 13, wherein a mechanism of changing from displaying one content set to a next content set appears to be a sudden change to human eye, in a fashion of an un-animated slide show.

22. The system according to claim 13, wherein a mechanism of changing from displaying one content set to a next content set is an animated change that takes place in a time-duration discernable to human eye, in a fashion of an animated slide-show.

23. The system according to claim 13, wherein a set of floating directional indicators is displayed overlapping a displaying content set to allow a viewer to access a previously displayed content set, or to skip to a next content set in a lineup of the plurality of content sets.

24. The system according to claim 13, wherein a content set in the plurality of content sets is embedded with a link, linking to information related to the content set.

Note A: Patent 10,296,198 contains 2 Independent Claims and 24 Total Claims.

Note D: Patent 9,405,802 contains 2 Independent Claims, and 26 Total Claims.

There can be any reasonable number of content-sets programmed to be displayed in any reasonable number of designated display areas in this page and any other pages, and each can be programed to display for any reasonable length of time, using any reasonable length of time for moving/transitioning a content-set data in and out of any designated display area as desired for a positive effect on the users/visitors/clients/partners/investors to the site, and bring them greater convenience.

Various sections and pages of the BOA website (s) can be and has been programed to use various features taught in the specification and claims in the family of Patents: **7308653, 7712044, 8108792, 8850352, 9053205, 9405852, 10296198 and 8438487** in a variety of ways at any given time as desired by the site owner, while bring more dynamic, changing and exciting attractions to the site to attract viewership and viewer attention, and improve the efficiency of selling and transaction. **Other Lin-Hendel's Internet related patents may also have been infringed by Bank of America and its subsidiaries such as Merrill Lynch.**

If Bank of America lawfully pays the licensing and royalty fees it owes the inventor/patent-owner from the first day Bank of America began to use these patents even more proficiently, and there would be and will be no need to litigate in civil court by the patent owner to recover damage and punitive damages, nor to report these Intellectual Property Theft. For example, The Agriculture Bank of China and China Merchants Group have been using these patents in deeper, wider and more advantageous ways.

Patents can be downloaded and printed for free from: www.freepatentsonline.com by entering each patent number. They can also be obtained from searching with the patent numbers at www.google.com/patents or www.USPTO.gov .

Several Independent claims in several other patents in this family of patents are listed below as examples:

7712044

Claim 1: A method of automatically scrolling displayed content, comprising: in an electronic device with a display and a user input mechanism: displaying content in a display window; displaying a floating icon; and in response to placement by a user of a cursor on the floating icon, and without any further user action, automatically scrolling through content extending beyond a display window into a field of view of the display window in a predetermined direction designated by the floating icon, wherein the automatic scrolling continues without user input.

Claim 8: A method of automatically scrolling displayed content comprising: in an electronic device with a display and a user input mechanism: displaying content in a display window; displaying a plurality of direction indicators; and in response to placement by a user of a cursor on at least one direction indicator of the plurality of direction indicators, and without any further user action, automatically scrolling through content extending beyond a display window into a field of view of the display window in a predetermined direction designated by the at least one direction indicator, wherein the automatic scrolling continues without user input.

Claim 9: An electronic device with a display having a graphical user interface, comprising: a browser display window having a field of view; a user input mechanism; and a floating icon for effectuating automatic scrolling through content in response to a cursor being placed on the floating icon, wherein the automatic scrolling continues without user input.

Claim 21: An apparatus for displaying and navigating through a website, the apparatus comprising a computer configured to perform the following: displaying in a computer display a browser window having a field of view for displaying a webpage of the website within the field of view; and during the displaying operation and without any user-initiated actions automatically scrolling at least part of the webpage, while the user of the computer does nothing.